

ABSTRACT

In an electromagnetic induction type speaker apparatus, individual constants are set in such a manner that the following formula is satisfied

$$N \times (R_1 \times R_2)^{1/2} / (2\pi \times L_1 \times (1 - k^2)^{1/2}) \geq 20000$$

where R_1 is the DC resistance of a primary coil 15; L_1 is the inductance of the primary coil 15; N is the number of turns of the primary coil 15; R_2 is the DC resistance of the secondary coil 18; L_2 is the inductance of the secondary coil 18; and k is the coupling coefficient of the primary coil 15 and the secondary coil 18.

In addition, the constants L_1 and L_2 are selected in such a manner that the ratio of the inductance L_1 and the inductance L_2 becomes equal to the ratio of the DC resistance R_1 and the DC resistance R_2 .